

I Claim

1. A blade cooling arrangement comprising a mounting hub
5 and a blade root having a coolant gallery formed therebetween and including at least one coolant passage opening and a flow deflector associated with that passage opening to deflect in use coolant flow through the coolant gallery towards the passage opening.
- 10 2. A flow deflector arrangement for a turbine blade, the arrangement comprising a mounting hub and a blade root having a coolant gallery formed therebetween, and flow deflector positioned in use in said coolant gallery, the deflector associated with a coolant passage opening to
15 deflect coolant flow in the gallery towards the passage opening whereby such deflection is progressive in order to limit coolant flow pressure loss upon passage through the coolant passage opening.
3. An arrangement as claimed in claim 1 wherein the flow
20 deflector has a curved surface to progressively deflect the coolant flow towards the passage opening.
4. An arrangement as claimed in claim 1 wherein the flow deflector is a ramp or wedge to lift coolant flow towards the passage opening to achieve progressive deflection of
25 the coolant flow towards that passage opening.
5. An arrangement as claimed in claim 1 wherein there is a plurality of flow deflectors to progressively deflect coolant flow towards the passage opening.
6. An arrangement as claimed in claim 1 wherein the flow
30 deflector extends upwardly from the mounting hub towards the passage opening.
7. An arrangement as claimed in claim 1 wherein the flow deflector extends downwardly from the blade root away from the passage opening.
- 35 8. An arrangement as claimed in claim 1 wherein the flow deflector is adjustable dependent upon specific

requirements.

9. An arrangement as claimed in claim 8 wherein adjustment of the flow deflector is by variation in material dimensions as a result of one of differential
5 expansion and contraction relative to one of the mounting hub and the blade root.

10. An arrangement as claimed in claim 8 wherein adjustment of the flow deflector is through a mechanical displacement under specific control of a controller.